

What Is Claimed Is:

1. A device for impact detection,  
wherein the device for impact protection has at least one piezo cable (10, 200).
2. The device as recited in Claim 1,  
wherein the piezo cable (10, 200) is configured such that the device detects a capacitance change by an impact object (31) with the aid of the piezo cable (10, 200).
3. The device as recited in Claim 2,  
wherein the piezo cable (10, 200) has a first shield (202) as an electrode for detecting the capacitance change.
4. The device as recited in Claim 3,  
wherein the first shield (202) has a cylindrical or semicylindrical design.
5. The device as recited in one of the preceding claims,  
wherein the piezo cable (10, 200) is configured such that an impact causes a piezoelectric pulse.
6. The device as recited in Claim 5,  
wherein the device is configured such that the device achieves a spatial resolution of the impact by means of a delay-time measurement.
7. The device as recited in Claim 6,  
wherein the piezoelectric pulse is evaluated directly, on the one hand, and is conveyed to an evaluation circuit via a delay line, on the other hand, so as to ascertain the delay time difference therefrom.
8. The device as recited in Claim 7,  
wherein a second shield (203) is provided as delay line, which is configured as a wound wire.
9. The device as recited in one of the preceding claims,

wherein the piezo cable (10, 200) is configured such that it undergoes a longitudinal change in an impact, which causes a resistance change.

10. The device as recited in Claim 9,  
wherein a signal characterizing the resistance change is converted to a higher frequency for evaluation.

11. The device as recited in one of Claims 8 through 10,  
wherein the second shield is configured to be inductive, to characterize the impact object with respect to its conductivity.

12. The device as recited in one of the preceding claims,  
wherein the piezo cable is arranged in the trim of a bumper (70).

13. The device as recited in Claim 12,  
wherein the piezo cable (73) is injected into the trim.

14. The device as recited in Claim 12,  
wherein the piezo cable (73) is clamped into the trim.